

## ABSTRACT OF THE DISCLOSURE

One or more embodiments of the invention provide a method, apparatus, and article of manufacture for refining an approximate location of a mobile device using fuzzy logic reasoning. An approximate location of a device is determined. A rule based  
5 that comprises an ordered collection of rules is then read into memory, or loaded from a database. A set of imprecise inputs are captured for processing in the rules.  
However, prior to processing the inputs in the rules, the inputs are processed to  
determine a magnitude of participation of the input in the rules. The rules are then  
applied to the imprecise inputs based on the magnitude of participation to produce a  
10 logical product. A refined location is then computed based on the logical product.

EL904208601 US

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